

April 9, 2021

Mr. David Albright  
Manager, Groundwater Protection Section  
USEPA Region 9 (WTR-4-2)  
75 Hawthorne St  
San Francisco, CA 94105

Subject: Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1  
5-day Notification of AL/AQL Exceedances at supplemental monitoring well M59-O

Dear Mr. Albright:

Florence Copper is providing this 5-day notification of alert level (AL) and AQL exceedances at supplemental monitor well M59-O as required under Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1 (Permit) Part II.H.2.a.ii and Part II.H.2.b.ii.

Routine quarterly groundwater sampling conducted in 1<sup>st</sup> quarter 2021 returned potential exceedances for magnesium, sulfate, TDS, and gross alpha from a sample collected on February 22, 2021. A verification sample was collected on March 23, 2021 within 14 days of becoming aware of the exceedances. The verification sample laboratory results received on April 5th confirmed an AL exceedance for sulfate and AL/AQL exceedances for gross alpha. In addition, radium levels were above the AL/AQL by 0.1 pCi/L. Magnesium, TDS and uranium levels were below their respective ALs (Table 1).

Florence Copper submitted a 30-day report on February 17, 2021 for AL/AQL exceedances in M59-O based on the 4<sup>th</sup> quarter 2020 sample results. The corrective actions that have been taken as described in the 30 day report have significantly decreased the analyte concentrations in this well between the 4<sup>th</sup> quarter 2020 and the 1<sup>st</sup> quarter 2021. The 4<sup>th</sup> quarter 2020 sample results have been added to Table 1 for comparative purposes.


As required under Parts II.H.2.a.iv. and II.H.2.b.iv., Florence Copper will submit a written report within 30 days (on or before May 6, 2021) providing an evaluation of the cause, impacts, or mitigation of the AL/AQL exceedances.

Table 1. M59-O Sampling Parameters

| Parameter                       | AL          | AQL        | 2/22/2021<br>Sample Results | 3/23/2021<br>Sample Results | 12/28/20<br>Sample Results |
|---------------------------------|-------------|------------|-----------------------------|-----------------------------|----------------------------|
| Magnesium                       | 23 mg/L     | --         | 26.5 mg/L                   | 19.1 mg/L                   | 57.2 mg/L                  |
| Sulfate                         | 202 mg/L    | --         | 383 mg/L                    | 228 mg/L                    | 865 mg/L                   |
| Total dissolved solids<br>(TDS) | 854 mg/L    | --         | 970 mg/L                    | 762 mg/L                    | 1,860 mg/L                 |
| Total Uranium                   | 0.0052 mg/L | --         | 0.0088 mg/L                 | 0.003 mg/L                  | 0.037 mg/L                 |
| Adjusted gross alpha            | 15.8 pCi/L  | 15.8 pCi/L | 17.9±1.4 pCi/L              | 18.8±1.5 pCi/L              | 73.5 ± 3.7 pCi/L           |
| Radium 226+228                  | 6.9 pCi/L   | 6.9 pCi/L  | 6.2±0.5 pCi/L               | 7.0±0.6 pCi/L               | 19.8 ± 0.8 pCi/L           |

Please feel free to contact me if you have any questions or comments.

Sincerely,  
**Florence Copper, Inc.**

 For BRENT BERG

Brent Berg  
 General Manager

Cc: Nancy Rumrill, EPA Region 9  
 Maribeth Greenslade, ADEQ